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NOTICE OF ALLOWANCE AND FEE(S) DUE

26119 7590 0603/2010 KLARQUIST SPARKMAN LLP 121 S.W. SALMON STREET SUITE 1600

PORTLAND, OR 97204

| EXAMINER | DAO, THUY CHAN | ART UNIT | PAPER NUMBER | 2192 | DATE MAILED 06/03/2010 |

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/624,705	07/21/2003	Mark Ronald Plesko	3382-65536	7062

TITLE OF INVENTION: REPRESENTING TYPE INFORMATION IN A COMPILER AND PROGRAMMING TOOLS FRAMEWORK

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$n	\$1910	00/03/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 1SI. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FFE: shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

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appropriate. All further indicated unless correcte maintenance fee notifical	correspondence includir ed below or directed oth	or transmitting the 1880 ig the Patent, advance of herwise in Block 1, by (rders and notification of n a) specifying a new corres	naintenance fees wi pondence address;	ill be and/or	mailed to the current (b) indicating a sepa	correspondence add rate "FEE ADDRE	fress as
		ock 1 for any change of address)	Note Fee(pape	e: A certificate of n s) Transmittal, This ers. Each additional	nailing certif paper	can only be used for icate cannot be used for such as an assignmentalling or transmission.	r domestic mailings or any other accomp nt or formal drawin	of the canying g, must
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PORTLAND, O	R 97204						(Depositor	(s name)
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APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTO	RNEY DOCKET NO.	CONFIRMATION	NO.
10/624,705 TITLE OF INVENTION	07/2I/2003 REPRESENTING TY	PE INFORMATION IN A	Mark Ronald Plesko A COMPILER AND PROC	RAMMING TOOL	S FR	3382-65536 AMEWORK	7062	
APPLN, TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE	FEE	TOTAL FEE(S) DUE	DATE DUE	
nonprovisional	NO	\$1510	\$300	\$0		\$1810	09/03/2010	,
EXAM	INER	ART UNIT	CLASS-SUBCLASS					
DAO, THU	JY CHAN	2192	717-114000					
"Fee Address" ind. PTO/SB/47; Rev 03-0 Number is required. 3. ASSIGNEE NAME A	ondence address (or Cha 3/122) attached. ication (or "Fee Address 12 or more recent) attach ND RESIDENCE DATZ less an assignee is ident h in 37 CFR 3.II. Comp	nge of Correspondence Indication form ed. Use of a Customer A TO BE PRINTED ON	2. For printing on the p (I) the names of up to or agents OR, alternativ (2) the name of a single registered attorney or a 2 registered patent attoe listed, no name will be THE PATENT (print or typ data will appear on the p of a substitute for filing an (B) RESIDENCE: (CTTY	3 registered patent vely, e firm (having as a signit) and the name meys or agents. If n printed.	memb s of u o nam	er a 2	ocument has been fi	
Please check the appropr	iate assignee category or	categories (will not be p	rinted on the patent):	Individual Cor	rporati	on or other private gro	oup entity 🗖 Gove	rnment
4a. The following fee(s): Issue Fee Publication Fee (N	o small entity discount p		b. Payment of Fee(s): (Plea A check is enclosed. Payment by credit can The Director is hereby overpayment, to Depo	d. Form PTO-2038	is atta	ched.		ny form).
	s SMALL ENTITY state	is. See 37 CFR 1.27.	☐ b. Applicant is no long					
NOTE: The Issue Fee an interest as shown by the	d Publication Fee (if req records of the United Sta	uired) will not be accepte tes Patent and Trademark	d from anyone other than to Office.	he applicant; a regis	tered :	attorney or agent; or th	e assignee or other p	party in
Authorized Signature				Date				
Typed or printed name				Registration No				
This collection of inform an application. Confident submitting the complete this form and/or suggesti Box 1450, Alexandria, V Alexandria, Virginia 223	ation is required by 37 C tiality is governed by 35 d application form to the ons for reducing this but firginia 22313-1450. DC 13-1450.	FR 1.311. The informatic U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to the ONOT SEND FEES OR	on is required to obtain or r 1.14. This collection is est depending upon the indiv e Chief Information Office COMPLETED FORMS TO	etain a benefit by th imated to take 12 m idual case. Any cor r, U.S. Patent and T O THIS ADDRESS.	e publ inutes nment fraden SENI	ic which is to file (and to complete, includir s on the amount of ti- nark Office, U.S. Dep D TO: Commissioner	by the USPTO to p g gathering, prepari ne you require to co artment of Commerc for Patents, P.O. Bo	rocess) ng, and omplete e, P.O. x 1450,

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26119	7590 06/03/2010		EXAM	UNER		
KLARQUIST S	PARKMAN LLP	DAO, THUY CHAN				
121 S.W. SALMON STREET			ART UNIT	PAPER NUMBER		
SUITE 1600 PORTLAND, OR 97204			2192 DATE MAILED: 06/03/2010			

Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 462 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 462 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

Application No. Applicant(s) 10/624 705 PLESKO ET AL. Notice of Allowability Examiner Art Unit 2192 Thuy Dao -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS. This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308. This communication is responsive to the amendment filed 02/17/10. 2. X The allowed claim(s) is/are 1, 3-13, 15, 17-21, 23, 24, 26, 28, 31-34, 36, 38, and 39 (renumbered 1-29)... 3. Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) \square All b) ☐ Some* c) ☐ None of the: 1. T Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. ___ 3. Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)). * Certified copies not received: _____. Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application. THIS THREE-MONTH PERIOD IS NOT EXTENDABLE. A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient. CORRECTED DRAWINGS (as "replacement sheets") must be submitted. (a) Including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached 1) hereto or 2) to Paper No./Mail Date (b) including changes required by the attached Examiner's Amendment / Comment or in the Office action of Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d). 6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL. Attachment(s) 1. Notice of References Cited (PTO-892) 5. Notice of Informal Patent Application 2. Notice of Draftperson's Patent Drawing Review (PTO-948) Interview Summary (PTO-413), Paper No./Mail Date Information Disclosure Statements (PTO/SB/08). T Examiner's Amendment/Comment Paper No./Mail Date 02/17/10

of Biological Material

4. T Examiner's Comment Regarding Requirement for Deposit

8. X Examiner's Statement of Reasons for Allowance

Supervisory Patent Examiner, Art Unit 2192

9. Other _____.
/Tuan Q. Dam/

Application/Control Number: 10/624,705 Page 2

Art Unit: 2192

DETAILED ACTION

 This action is responsive to the amendment filed February 17, 2010. In the instant amendment, claims 1, 20, 31, and 36 have been amended.

2. Claims 1, 3-13, 15, 17-21, 23, 24, 26, 28, 31-34, 36, 38, and 39 have been examined and are allowed (renumbered 1-29).

Examiner's Statement of Reasons for Allowance

3. The following is an examiner's statement of reasons for allowance: as Applicants pointed out in the Remarks, the prior art of record (Gordon, Microsoft-IL, and Syme) do not disclose and/or fairly suggest at least claimed limitations recited in such manners in independent claim 1 "...wherein one of the sub-classes representing a primitive type represents an unknown type, wherein the unknown type can represent any type, wherein the unknown type represents a lack of all type information, wherein a compiler drops type information by changing a known type to the unknown type during a stage of lowering, wherein the unknown type is set independently of the primitive type size, and wherein the classifications of types support an unknown type with an unknown primitive type size." and similarly recited in such manners in other independent claims 20, 31, and 36 (Remarks, pp. 9-14).

These claimed limitations are not present in the prior art of record and would not have been obvious, thus all pending claims are allowed.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance"

Conclusion

 Any inquiry concerning this communication should be directed to examiner Thuy (Twee) Dao, whose telephone/fax numbers are (571) 272 8570 and (571) 273 8570, Art Unit: 2192

respectively. The examiner can normally be reached on every Tuesday, Thursday, and Friday from 6:00AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tuan Q. Dam, can be reached at (571) 272 3695.

Any inquiry of a general nature of relating to the status of this application or proceeding should be directed to the TC 2100 Group receptionist whose telephone number is (571) 272 2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Thuy Dao/ (Twee) Examiner, Art Unit 2192 /Tuan Q. Dam/ Supervisory Patent Examiner, Art Unit 2192